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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,913	03/09/2001	Kesatoshi Takeuchi	204155US2	2612

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EXAMINER
WANG, JIN CHENG

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/801,913	TAKEUCHI ET AL.	
	Examiner	Art Unit	
	Jin-Cheng Wang	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-15 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Notice of Change in Art Unit

The Group and/or Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2672.

Specification

1. The disclosure is objected to because of the following informalities: On page 1, line 11, "a image" should be "an image". On page 2, line 10, "to receives" should be "to receive". Appropriate correction of *all mistakes* is required.

2. The applicant or their representatives are urged to review the specification and submit corrections for all mistakes of a grammatical, clerical, or typographical nature.

Claim Objections

3. Claim 5 is objected to because of the following informalities: On line 3 of claim 5, "to receives" should be "to receive". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1,6 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1,6 and 10, the phrase "selecting from among an m number of image signals one reference image signal and (n-1) number of superimposing image signals, m being an integer greater than 2" renders the claim indefinite because it is unclear in regards to the relationship between m number of image signals and n number of image signals or whether the n number of superimposing image signals are selected from the m number of (input) image signals wherein m being larger than n.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Glen U.S. Pat. No. 6,157,415.

8. Claim 1:

The Glen reference teaches an overlay image processing device (figure 2) for generating an overlay image signal composed of an n number of superimposed image signals, n being an integer greater than 1, the overlay image processing device comprising:

(a) An image selector (figure 2) configured to select from among an m number of image signals one reference image signal and (n-1) number of superimposing image signals, m being an integer greater than 2 (figure 6);

(b) A resolution converter configured to convert resolutions of the n number of selected image signals including the reference image signal and the (n-1) number of superimposing image signals into respective desired resolutions (figures 4-7); and

(c) An image synthesizer (blend module 76, 78 and 80) configured to superimpose the (n-1) number of converted superimposing image signals on the converted reference signal (figure 3).

Claim 2:

The claim 2 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of at least one of the m number of image signals being a display signal output from a personal computer. However, the Glen reference further discloses the claimed limitation of at least one of the m number of image signals being a display signal output from a personal computer (figure 2).

Claim 3:

The claim 3 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of the image selector selects the reference image signal and the (n-1) number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and the image synthesizer superimposes the (n-1) number of converted superimposing image signals on the converted reference image signal according to the order of superposition. However, the Glen reference further discloses the claimed limitation of

the image selector selects the reference image signal and the (n-1) number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals (figures 6 and 9); and the image synthesizer superimposes the (n-1) number of converted superimposing image signals on the converted reference image signal according to the order of superposition (figure 5).

Claim 4:

The claim 4 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of a scan converter that converts the at least one interlaced image signal into a non-interlaced image signal. However, the Glen reference further discloses the claimed limitation of a scan converter that converts the at least one interlaced image signal into a non-interlaced image signal (figures 5, 6 and 9).

Claim 5:

The claim 5 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of the image synthesizer having the n number of 2-input image synthesizers, each 2-input image synthesizer being configured to receive upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal; the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of ith stage, where I is between 2 and n, inclusive, uses an output of the 2-input image synthesizer of (I –1)th stage as the lower-side image signal and ith superimposing image signal as the upper-side image signal. However, the Glen reference further discloses the

claimed limitation of the image synthesizer having the n number of 2-input image synthesizers, each 2-input image synthesizer being configured to receive upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal; the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of ith stage, where I is between 2 and n, inclusive, uses an output of the 2-input image synthesizer of (I –1)th stage as the lower-side image signal and ith superimposing image signal as the upper-side image signal (figures 5, 6 and 9, and column 3, lines 51-65).

9. Claim 6:

The Glen reference teaches an overlay image display device (figure 1, column 8, lines 46-58, column 9, lines 39-53) for displaying an overlay image composed of an number of superimposed images, n being an integer greater than 1, the overlay image display device (figure 1) comprising:

An overlay image processing device (figure 2) for generating an overlay image signal composed of an n number of superimposed image signals, and the overlay display device for displaying an image represented by the overlay image signal; the overlay image processing device includes:

(a) An image selector (figure 2) configured to select from among an m number of image signals one reference image signal and (n-1) number of superimposing image signals, m being an integer greater than 2 (figure 6);

(b) A resolution converter configured to convert resolutions of the n number of selected image signals including the reference image signal and the (n-1) number of superimposing image signals into respective desired resolutions (figures 4-7); and

(c) An image synthesizer (blend module 76, 78 and 80) configured to superimpose the (n-1) number of converted superimposing image signals on the converted reference signal (figure 3).

Claim 7:

The claim 7 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of at least one of the m number of image signals being a display signal output from a personal computer. However, the Glen reference further discloses the claimed limitation of at least one of the m number of image signals being a display signal output from a personal computer (figure 2).

Claim 8:

The claim 8 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of the image selector selects the reference image signal and the (n-1) number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and the image synthesizer superimposes the (n-1) number of converted superimposing image signals on the converted reference image signal according to the order of superposition. However, the Glen reference further discloses the claimed limitation of the image selector selects the reference image signal and the (n-1) number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals (figures 6 and 9); and the image synthesizer superimposes the (n-1) number of

converted superimposing image signals on the converted reference image signal according to the order of superposition (figure 5).

Claim 9:

The claim 9 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of a scan converter that converts the at least one interlaced image signal into a non-interlaced image signal. However, the Glen reference further discloses the claimed limitation of a scan converter that converts the at least one interlaced image signal into a non-interlaced image signal (figures 5, 6 and 9).

Claim 10:

The claim 10 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of the image synthesizer having the n number of 2-input image synthesizers, each 2-input image synthesizer being configured to receive upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal; the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of ith stage, where I is between 2 and n, inclusive, uses an output of the 2-input image synthesizer of (I –1)th stage as the lower-side image signal and ith superimposing image signal as the upper-side image signal. However, the Glen reference further discloses the claimed limitation of the image synthesizer having the n number of 2-input image synthesizers, each 2-input image synthesizer being configured to receive upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal;

the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of ith stage, where I is between 2 and n, inclusive, uses an output of the 2-input image synthesizer of (I –1)th stage as the lower-side image signal and ith superimposing image signal as the upper-side image signal (figures 5, 6 and 9, and column 3, lines 51-65).

10. Claims 11-15:

Each of the claims 11-15 is a rephrasing of the claims 1-5 respectively in a method form. The claims are rejected for the same reason as set forth above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsumoto et al. U.S. Pat. No. 6,473,088 discloses a multiple images display system including a plurality of image data input portions for receiving image data from a plurality of image sources.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (703) 605-1213. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 308-6606 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 395-3900.

jcw
February 19, 2003

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600